### Why Safe Routes to School Matters: Safety, Health & Transportation



SafeRoutes





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SafeRoutes



### Problems. Solutions.





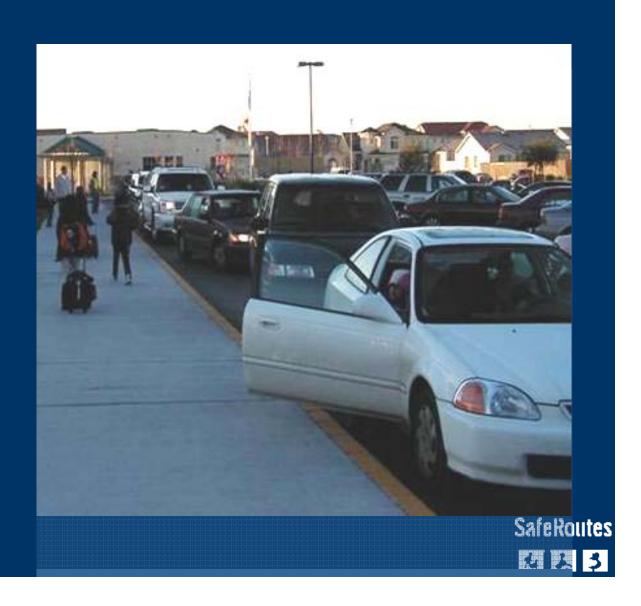


### Fewer kids are biking and walking. More parents are driving.

2001: 16% walked

1969: 42% walked

(CDC, 2005)





### The consequences of *this...*



### ...instead of *this* can be alarming.



## Promoting safe walking and bicycling is an ideal strategy to increase physical activity.



Today's children may be the first generation to have a shorter life expectancy than their parents have.









### Safe Routes to School Programs



#### History of Safe Routes to School

Many child pedestrian fatalities in Denmark, 1970s

Odense reduced the number of injured school children by 30% to 40%

Caught on in UK and Canada in the 1990's; Bronx, NY, in 1997







### Benefits of SRTS programs

Reduce the number of children hit by cars

Improve children's health

Reduce congestion around schools

Reduce air pollution

Can lead to cost savings for schools (reduce need for "hazard" busing)

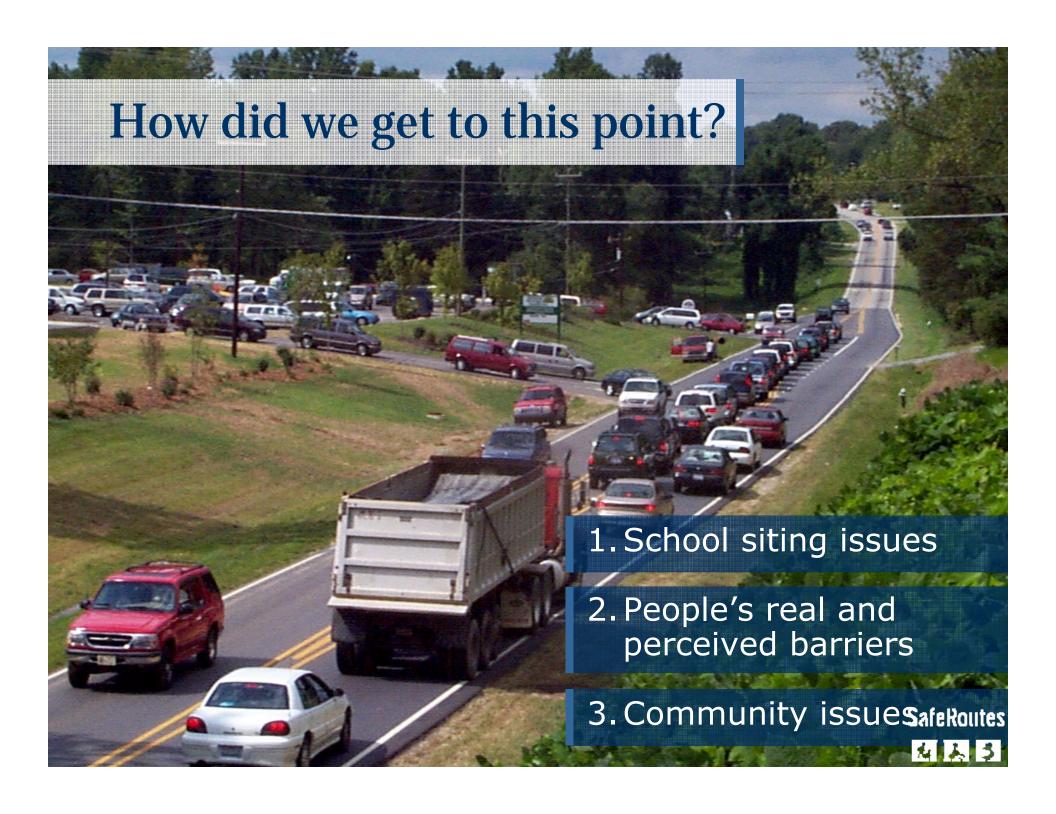
Others: increase child's sense of freedom, help establish lifetime habits, teach pedestrian skills

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# Today's barriers to walking and bicycling:



### 1. School siting issues: a generation ago



(EPA, 2003; 1969 Nationwide Personal Transportation Sur

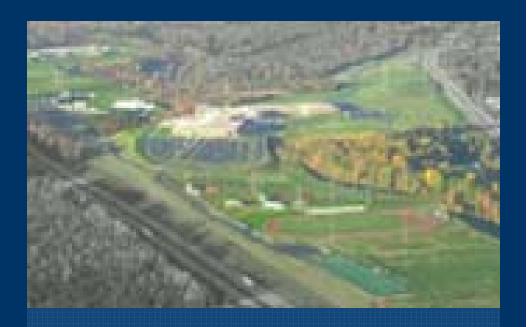
### 1. School siting issues: today

Mega-schools (average 653 students)

40% of high schools have attendance of 1500+ students

Schools located on 10 to 30+ acres fringe land

Lowest-cost construction



(U.S. Department of Education, 2002)



### School consolidation has lengthened the trip between home and school



In 2001, about 16% of kids walk or bike to school

(CDC 2005)







## 2. People's real and perceived barriers to walking and bicycling to school

Long distances 62%

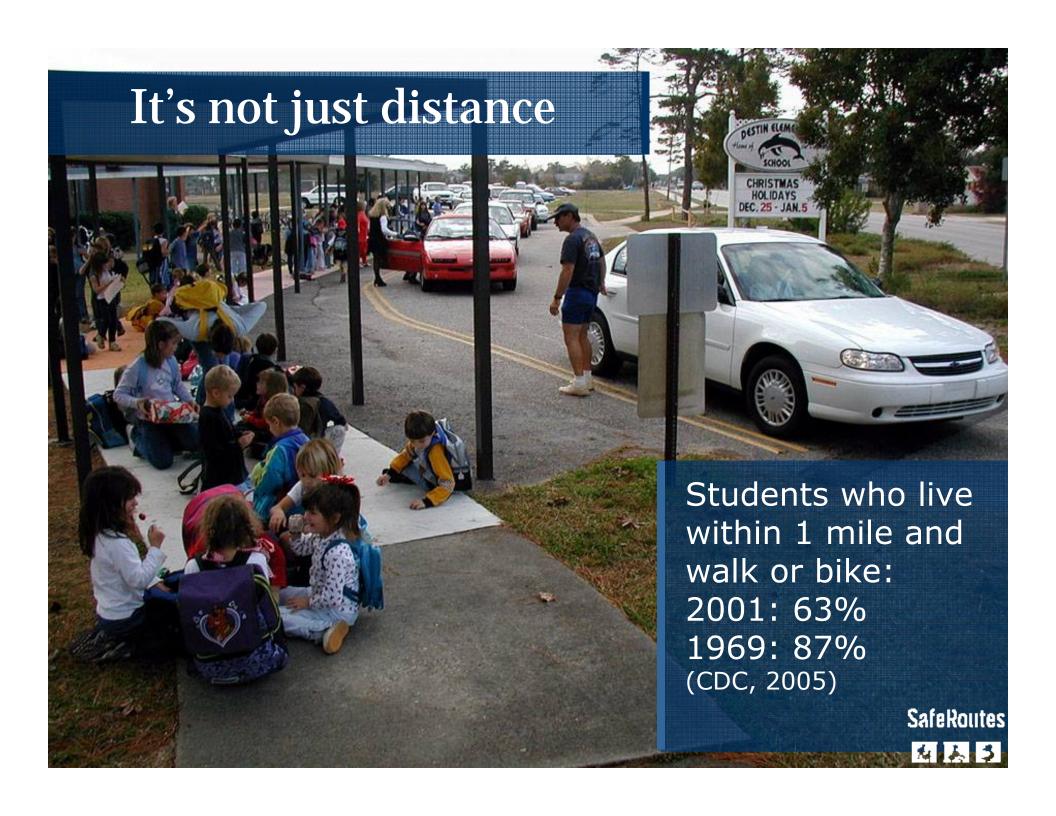
Traffic danger 30%

Adverse weather 19%

Fear of crime danger 12%

(including "stranger danger")

(CDC, 2005)



### Traffic danger

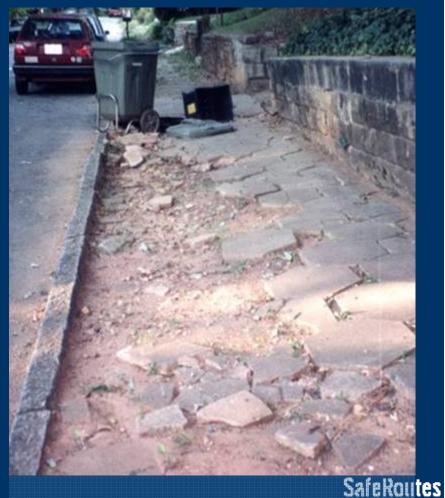


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### Community conditions make it hard to walk or bike





### Adverse weather



Is this barrier reflective of changed social norms?

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### Fear of crime danger

Identify perceptions and realities—both are important to address

Some low probability events provoke the greatest fears

Communities are finding ways to safeguard against these fears



### 3. Difficult community issues

Traffic flow problems

Abandoned buildings

Illegal behaviors





## Unintended consequences of less walking and bicycling:

- to the environment
- to our health







#### Results of the ban

Morning traffic – down 23%

Peak ozone – down 28%

Asthma-related events for kids – down 42%

### Air quality

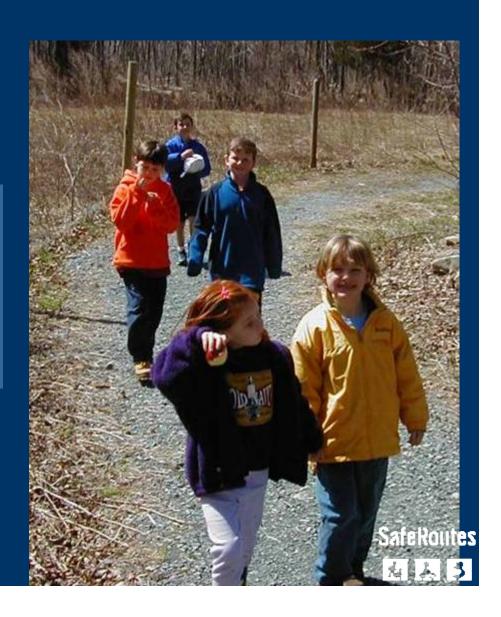




### Physical activity recommendation for children:

(US Depts. of Health and Human Services and Agriculture, 2005)

At least 60 minutes of physical activity on most, preferably all, days of the week.



### Overweight children have an increased risk of...

Type 2 Diabetes

Low self esteem

Aggravated existing asthma

Sleep apnea

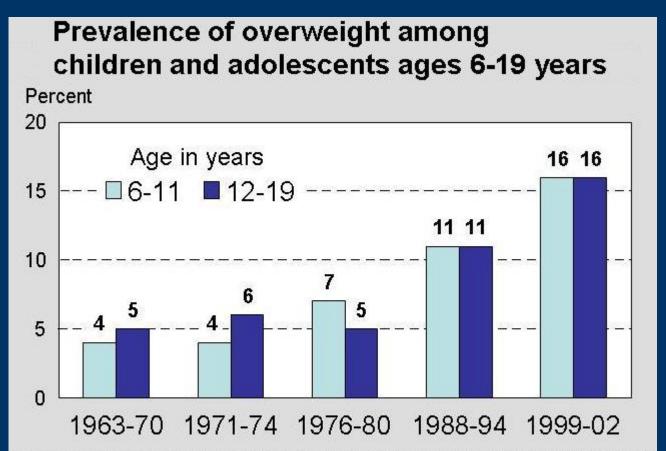
Decreased physical functioning

Many other negative emotional & physical effects

(American Academy of Pediatrics, 2005)



### U.S. youth overweight rates

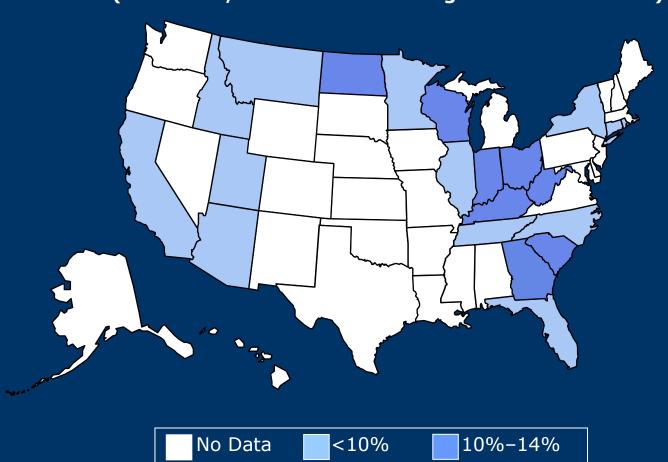


NOTE: Excludes pregnant women starting with 1971-74. Pregnancy status not available for 1963-65 and 1966-70. Data for 1963-65 are for children 6-11 years of age; data for 1966-70 are for adolescents 12-17 years of age, not 12-19 years. SOURCE: CDC/NCHS, NHES and NHANES

(National Center for Health Statistics)



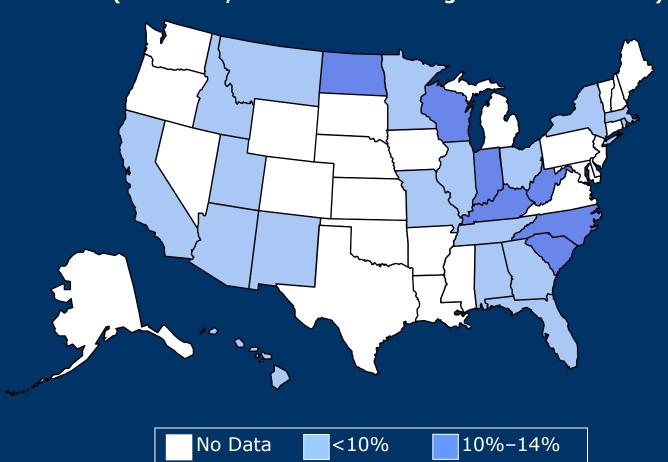
(\*BMI ≥30, or ~ 30 lbs overweight for 5′ 4″ woman)







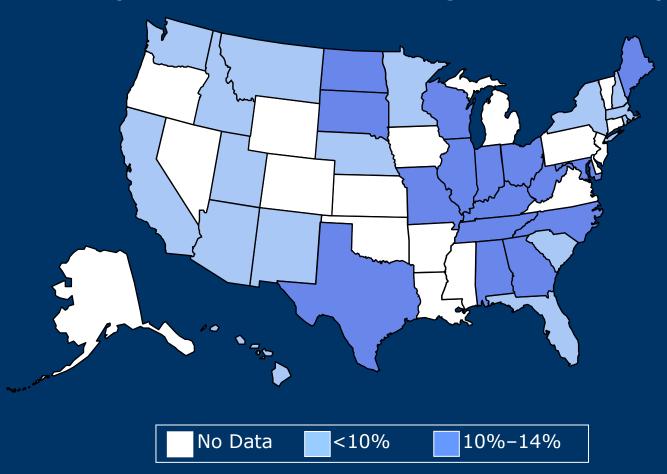
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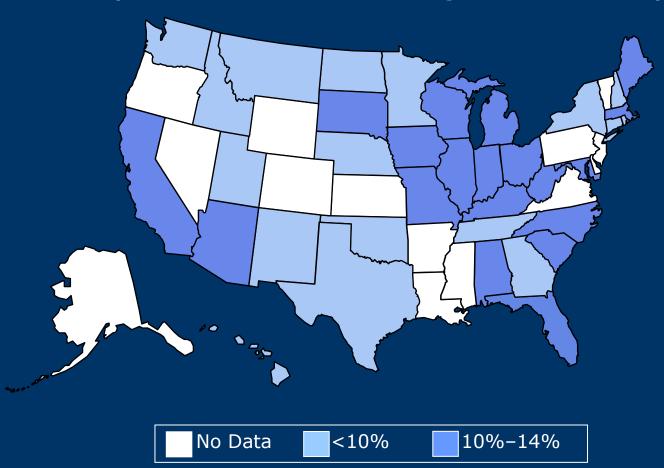








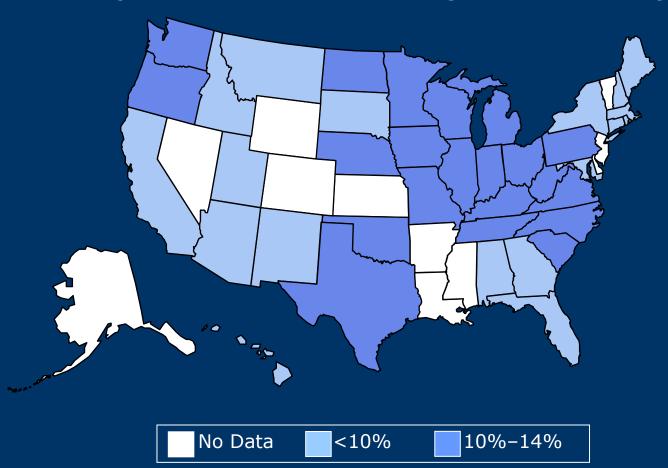
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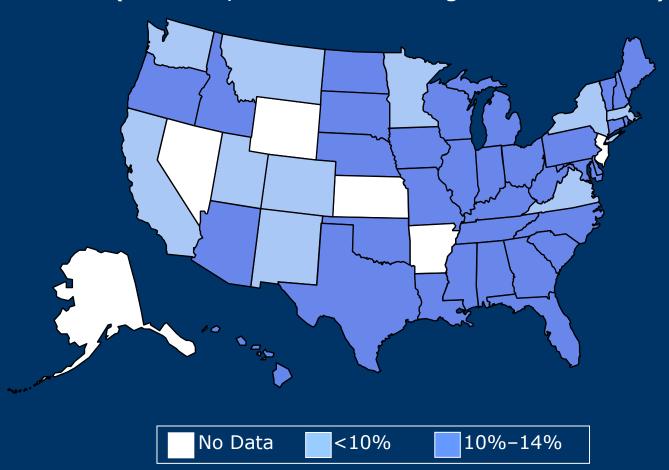
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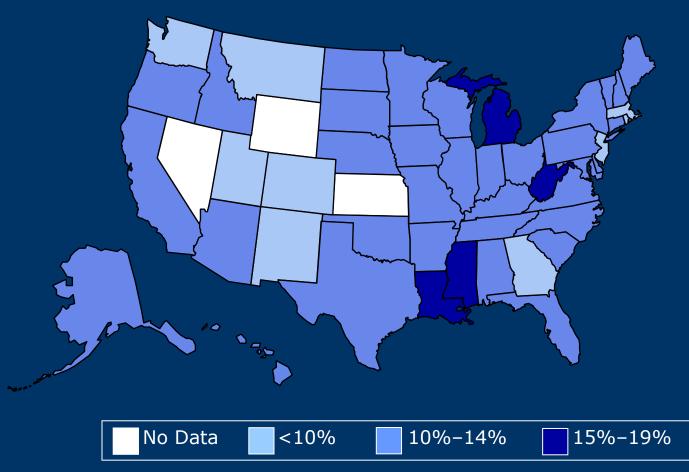
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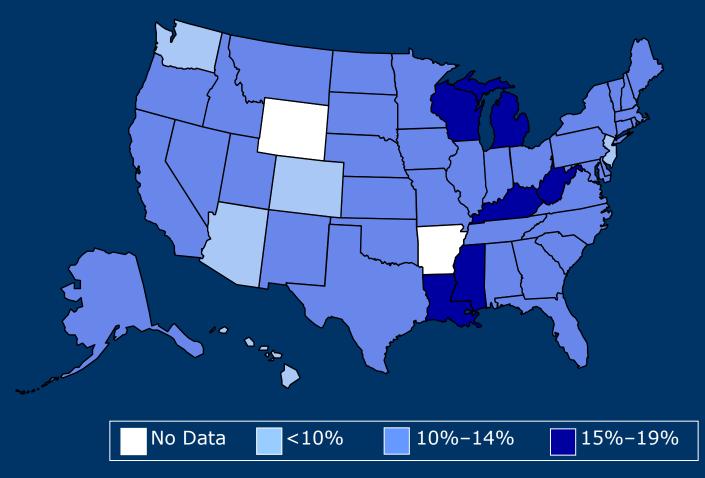








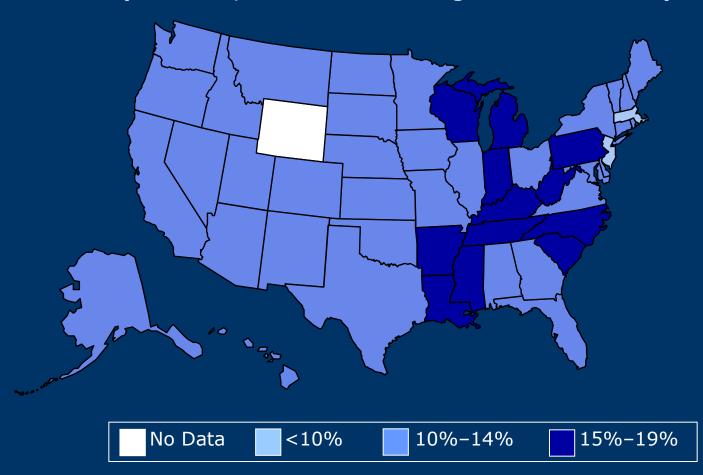
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(Behavioral Risk Factor Surveillance System, CDC, 2004) SafeRoutes

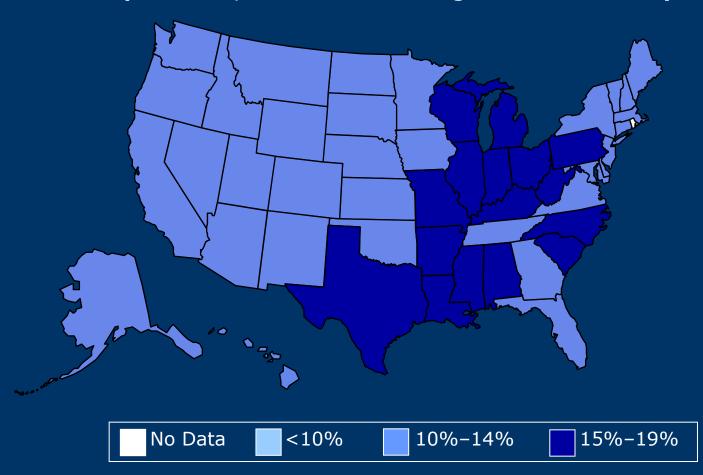


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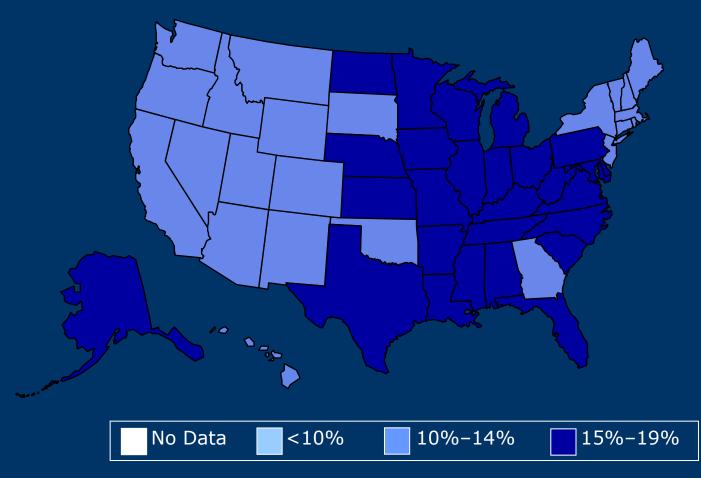


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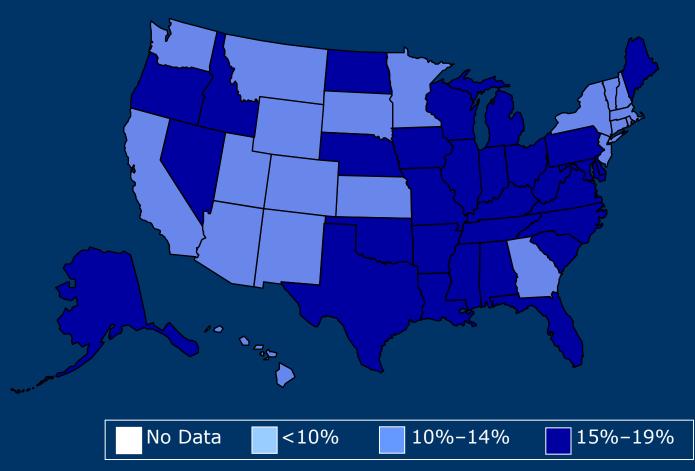




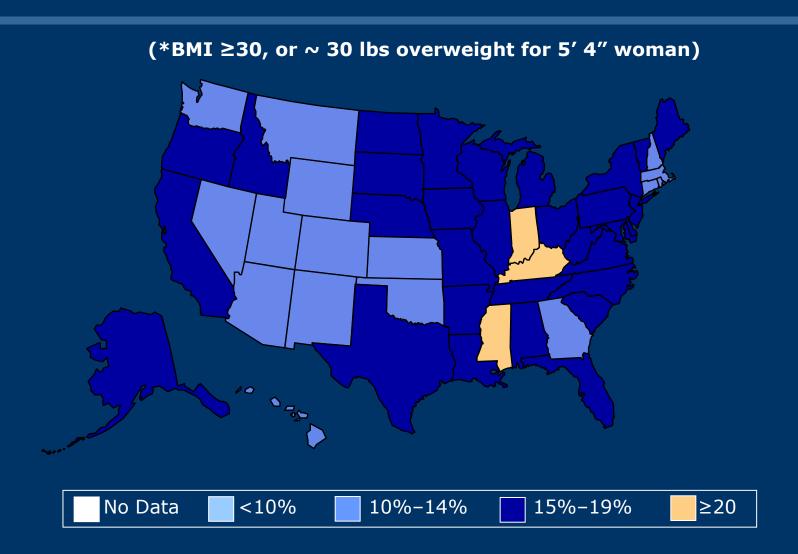




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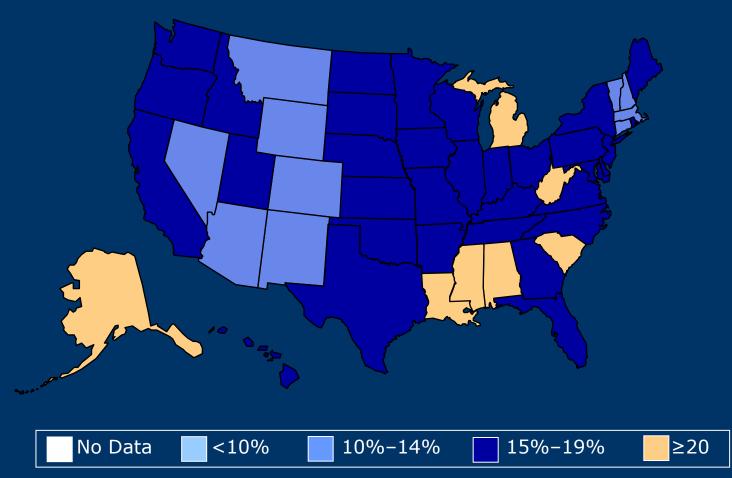






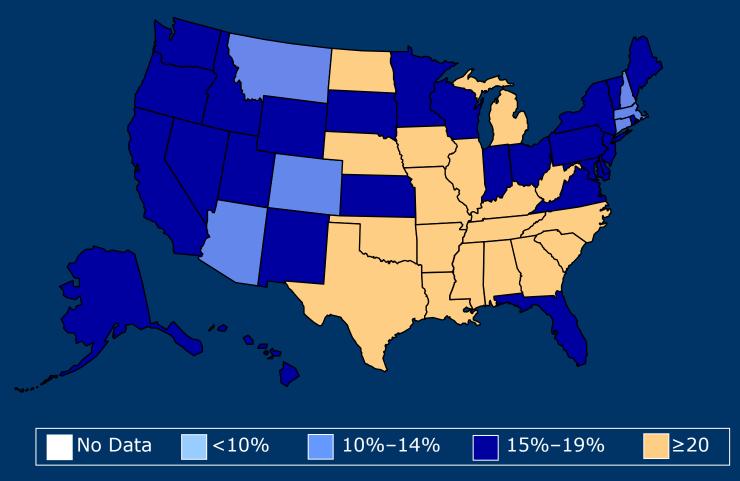






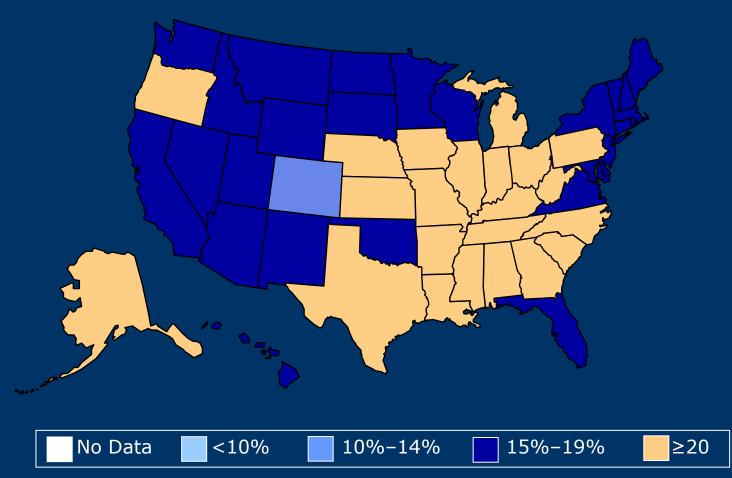






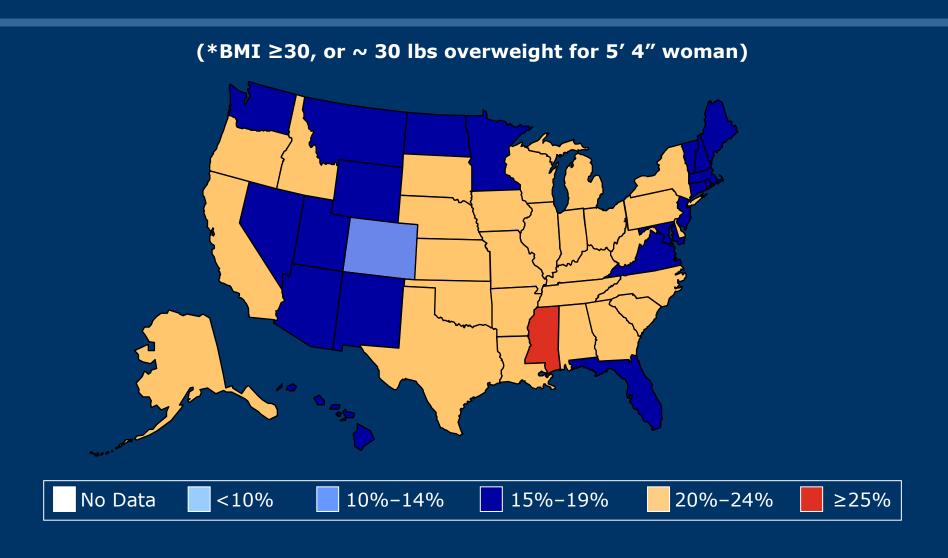




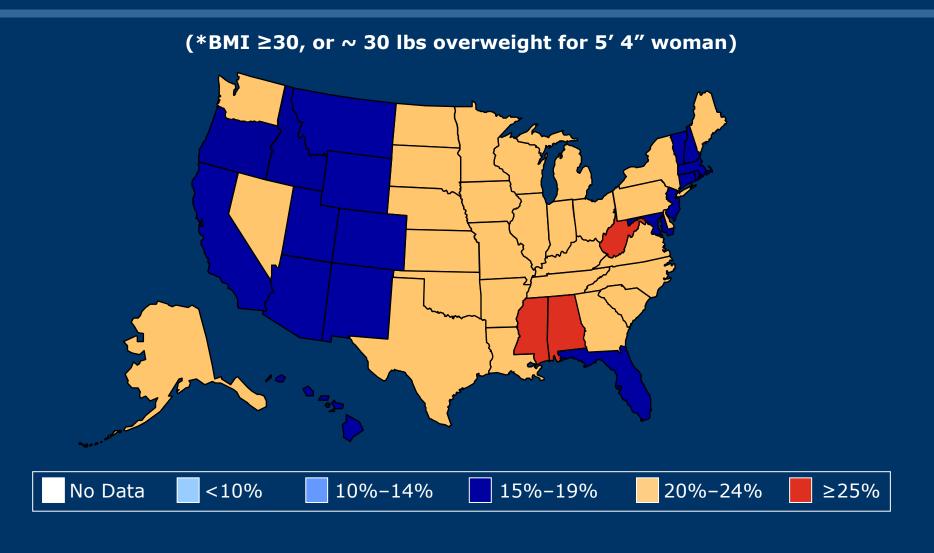


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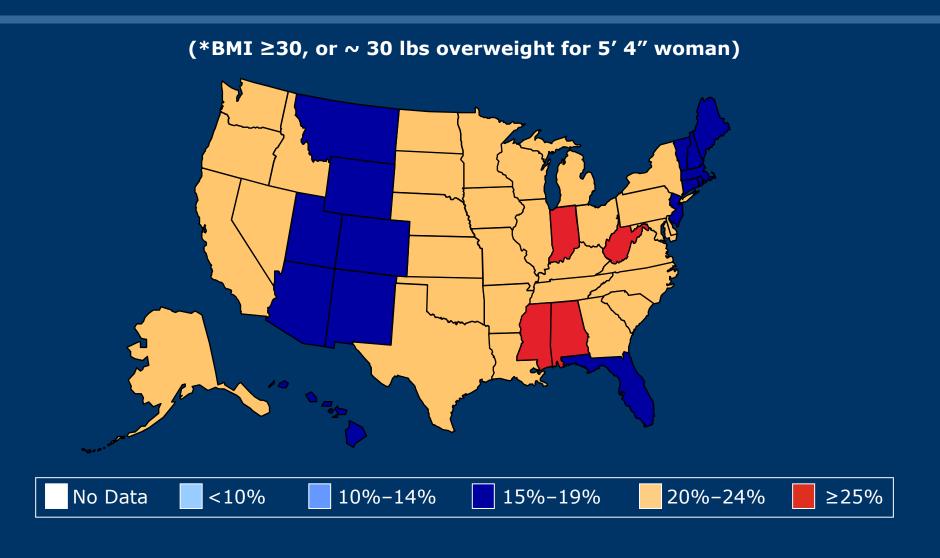




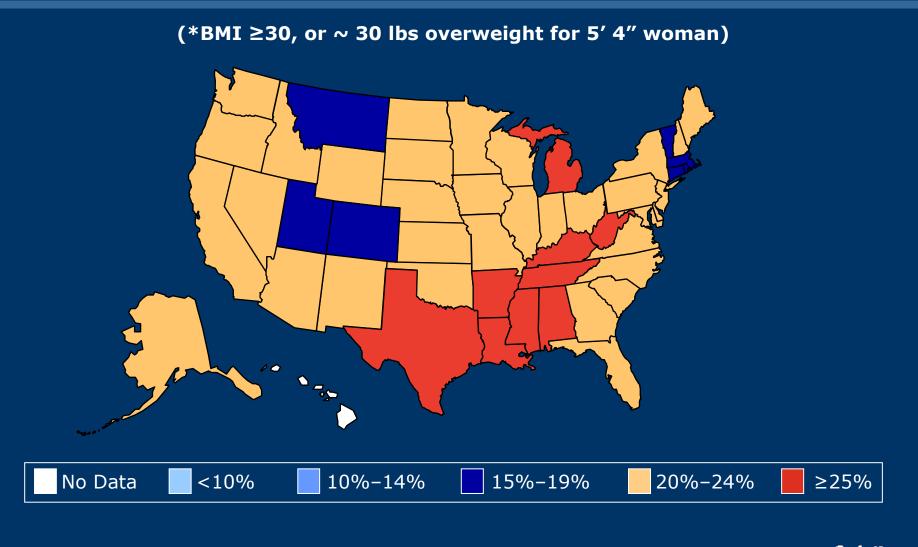
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(Behavioral Risk Factor Surveillance System, CDC, 2004) SafeRoutes

Communities are taking action on behalf of their kids:



# Safe Routes to School programs are part of the solution...



...to increase physical activity

...to improve unsafe walking and biking conditions

...to improve poor air quality by reducing vehicle emissions



## Safe Routes to School goals

Where it's safe, get kids walking and biking

Where it's not safe, make it safe









### Steps in creating a SRTS Program

Bring together the right people

Hold a kick- off meeting

Gather information and identify issues

Identify solutions

Develop a Plan

Fund the plan

Act on the plan

Evaluate, make needed changes and keep moving





## Every school faces a different challenge





SafeRoute:



## Elements of Safe Routes to School programs

Education

Encouragement

Enforcement

Engineering

**Evaluation** 



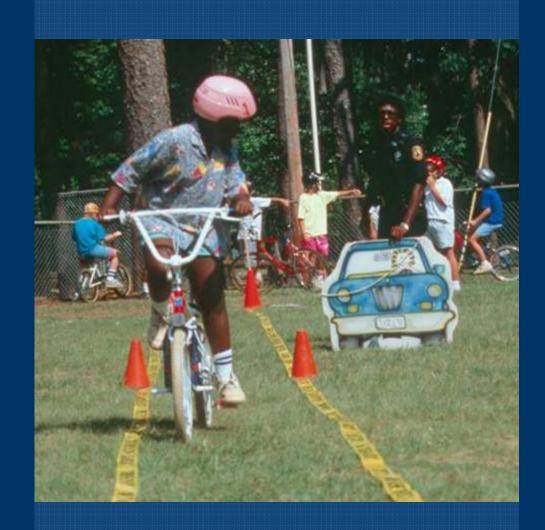
#### Education

Teaches safety skills

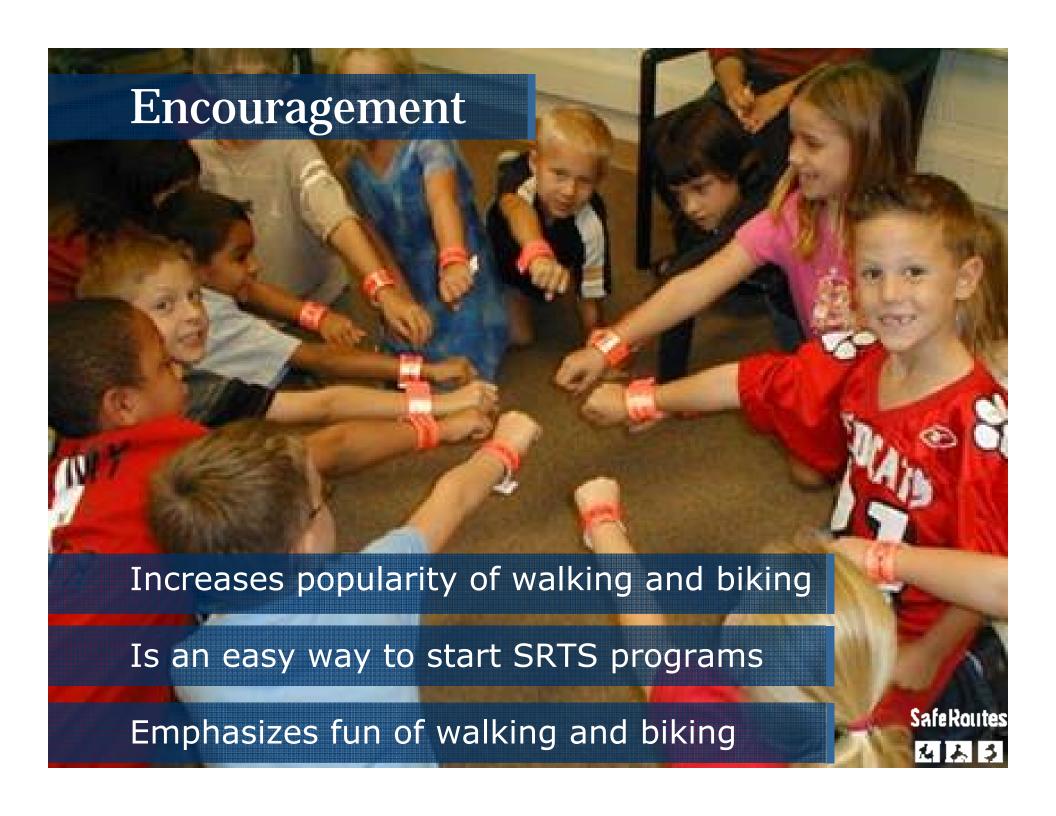
Creates safety awareness

Fosters life-long safety habits

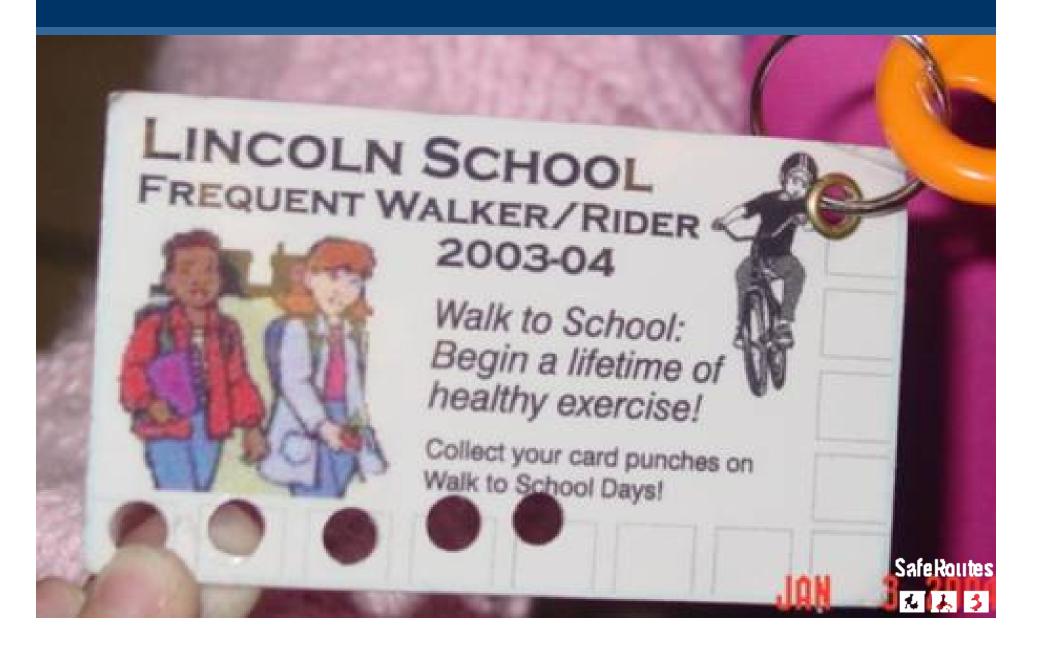
Includes parents, neighbors and other drivers







## Encouragement



#### Enforcement

Increases awareness of pedestrians and bicyclists

Improves driver behavior

Helps children follow traffic rules

Decreases parent perceptions of danger





## Engineering

School zone

Along the routes and streets

Crosswalks

Vehicle speed reduction





## Engineering



Creates safer settings for walking and biking

Can influence the way people behave







### The time is right

Growing enrollment

Old existing facilities

Demand for new and renovated facilities

Opportunity to make important decisions for the future

(Digest of Education Statistics, 2002)







# **Community Success Stories:**



## Success story: Marin County, CA, encouragement programs

Walk or Wheel Wednesdays

Frequent Rider Mile Contests

Walking school buses

Fliers, posters, newsletters

Media coverage

Website





#### Marin County results

Increase in the number of children walking to school

Increase in the number of children biking to school

Increase in carpooling

Decrease in children transported to school by private car

(American Journal of Public Health, 2003)



## Success story: Wisconsin and South Carolina rethinking neighborhood schools

Milwaukee's Neighborhood School Initiative



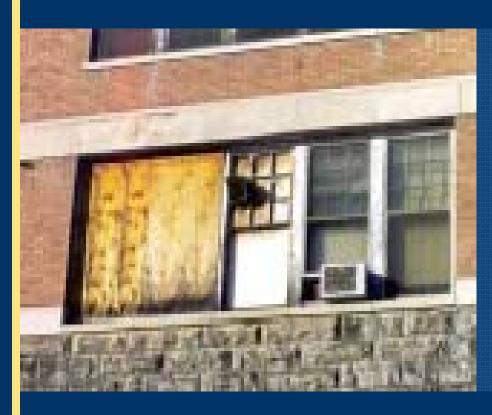
South Carolina eliminates acreage requirements

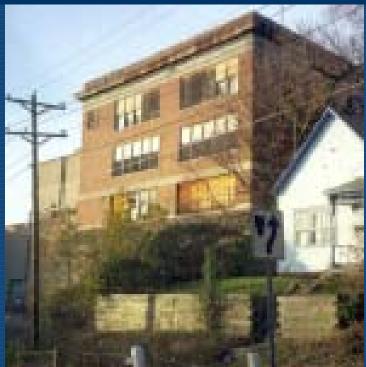






## Success story: St. Paul, MN, renovation, revitalization





Before: abandoned building in bad disrepair











After: renovated school includes YMCA and daycare center







## Success story: Cleveland, Ohio, safety programs



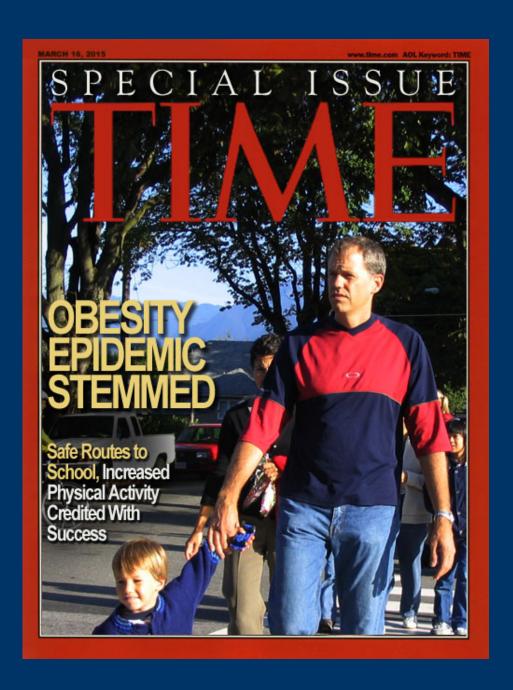


#### Engineering treatments such as:

- New and restored crosswalk markings and signs
- Citywide crosswalk signal and pushbutton installation is











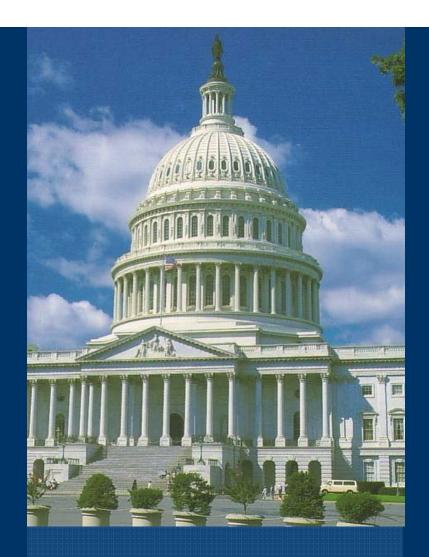
# Federal Safe Routes to School program

\$612 million to States

Program Guidance issued January 2006

Funds infrastructure and non-infrastructure activities

Requires State SRTS Coordinators



More Information:

FHWA:

http://safety.fhwa.dot.gov/
saferoutes/
SafeRoutes







#### State Programs



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Arizona Safe Routes To School web page:

http://www.azdot.gov/saferoutes









